



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/814,188	04/01/2004	Katsumi Nishijima	8001-1195	6415
466	7590	01/11/2010	EXAMINER	
YOUNG & THOMPSON			WENDELL, ANDREW	
209 Madison Street			ART UNIT	PAPER NUMBER
Suite 500			2618	
Alexandria, VA 22314				
NOTIFICATION DATE		DELIVERY MODE		
01/11/2010		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

DocketingDept@young-thompson.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/814,188	<b>Applicant(s)</b> NISHIJIMA ET AL.
	<b>Examiner</b> ANDREW WENDELL	<b>Art Unit</b> 2618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) Responsive to communication(s) filed on 18 November 2009.

2a) This action is FINAL.      2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) Claim(s) 1-3,5-25 and 37-39 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1-3,5-25 and 37-39 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO/SB/06)  
 Paper No(s)/Mail Date \_\_\_\_\_

4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date \_\_\_\_\_

5) Notice of Informal Patent Application

6) Other: \_\_\_\_\_

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3, 5-7, 10-12, 16-19, 24-25, and 37-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishimura (US Pat Pub# 2006/0063570) in view of Hirayama (EP 1 271 897 A2, cited by applicant).

Regarding claim 1, Nishimura's portable apparatus teaches a mobile terminal 100 (Fig. 1), comprising a control unit 99 (Fig. 1; Section 0033; obvious there is a control unit to have communication); a display unit 54 and 4 (Fig. 1); an upper housing 51 (Fig. 1); a lower housing 2 (Fig. 1); and a 2-axis hinge unit 3 and 11 (Fig. 3) for coupling the housings 2 and 51 (Fig. 1) for folding and swinging movement of the upper housing relative to the lower housing about intersecting axes, one of which is arranged in the lower housing 2 (Fig. 1) and the other of which is arranged in the upper housing 51 (Fig. 1); wherein a top face of the one of the axes is exposed 3 (Fig. 2) outside the terminal 1, 4, and 6 (Fig. 2), and an information input device 4 and 6 (Fig. 2) is mounted in the top face of one of the axes. Nishimura fails to teach a pointing device, intersecting axes is formed in a column, and a through cutting in an edge portion of the upper housing.

Hirayama teaches a control unit 10 (Fig. 5); a display unit 3A (Figs. 1 and 3-5); an upper housing 3 (Fig. 3) including a through cutting in an edge portion 4 and 7 (Fig. 3, through cutting for axes and joystick); a lower housing 2 (Fig. 3); and a axis hinge unit 4 (Figs. 1-4) coupling the housings for swinging movement of the upper housing relative to the lower housing about intersecting axes (Figs. 1-4, shows swinging movement with the housings), one of which is arranged in the lower housing and the other of which is arranged in the upper housing (Figs. 1-4, shows the axes 4 is arranged both on the upper and lower housings), the intersecting axes 4 (Figs. 1-4) is formed in a column (shows a column shape and column cut out of the upper housing); wherein a top face of the one of the axes 4 (Figs. 1-4) is exposed outside the terminal for viewing due to arranging the one of the axes in the through cutting of the upper housing in all positions of the upper housing (shows the axes and joystick are exposed outside the terminal through the cutting of the upper housing), and an information input device 7 (Figs. 1 and 3-4) is mounted in the top face of one of the axes 4 (Figs. 1 and 3-4 and section 0046), the through cutting is formed to a sector, the upper housing closely swings around a circumference of the column axis (Figs. 1-4 shows the upper housing swings about the circumference of the column axis); and wherein the information input device 7 (Figs. 1 and 3-4) is a pointing device (Section 0063).

Therefore, it would have been obvious at the time of the invention to one of ordinary skill in the art at the time the invention was made to incorporate a pointing device, intersecting axes is formed in a column, and a through cutting in an edge portion of the upper housing as taught by Hirayama into Nishimura's portable

apparatus in order to increase multifunction capabilities and reduce the size (Section 0008).

Regarding claim 2, the combination including Hirayama teaches wherein the control unit 10 (Fig. 5) controls the terminal according to an operation of the information input device (Section 0063).

Regarding claim 3, the combination including Hirayama teaches wherein the control unit 10 (Fig. 5) assigns a predetermined function to the information input device (Section 0063).

Regarding claim 5, the combination including Hirayama teaches wherein the control unit 10 (Fig. 5) assigns another operating function to the pointing device (Section 0063, can select another different song).

Regarding claim 6, the combination including Hirayama teaches wherein the information input device 7 (Figs. 1 and 3-4) further comprises a terminal operating function (Section 0063).

Regarding claim 7, the combination including Hirayama teaches wherein the terminal operating function is performed by a press (Section 0063). Note, the user has to perform the function, so a press or some pressure has to be performed for a user to have function.

Regarding claim 10, the combination including Hirayama teaches position detection means 14 (Fig. 5) for detecting relative positions between the upper housing and the lower housing (Sections 0060-0061).

Regarding claim 11, the combination including Hirayama teaches wherein the control unit 10 (Fig. 5) controls the terminal based on an output of the position detection means (Sections 0061, 0070, 0073, and 0077).

Regarding claim 12, the combination including Hirayama teaches wherein the control unit 10 (Fig. 5) controls an operation of the information input device (Section 0063).

Regarding claim 16, the combination including Hirayama teaches wherein the position detection means detect a turning direction of the housings (Sections 0060-0061).

Regarding claim 17, the combination including Hirayama teaches wherein the control unit controls the display unit based on the turning direction of the housings (Sections 0061, 0070, 0073, and 0077).

Regarding claim 18, the combination including Hirayama teaches wherein the control unit detects an operation of a predetermined operation key to control an operation of the information input device (Section 0063).

Regarding claim 19, the combination including Hirayama teaches wherein the control unit controls an operation of the information input device while a predetermined operation key is operated (Section 0063).

Regarding claim 24, the combination including Nishimura further teaches wherein the terminal is a mobile telephone 100 (Fig. 1).

Regarding claim 25, the combination including Nishimura further teaches wherein the two axes of the 2-axis hinge unit are a folding axis and a horizontal rotation axis

(Fig. 3), the upper housing 51 (Fig. 3), and the one of the axes is the horizontal rotation axis (Figs. 2, 5, and 7).

Regarding claim 37, apparatus claim 37 is rejected for the same reason as apparatus claim 1 since the recited elements would perform the claimed steps.

Regarding claim 38, the combination including Hirayama teaches wherein a lower portion of the horizontal rotation axis 4 (Figs. 1-4) is in the lower housing 2 (Figs. 1-4) and an upper portion is in the through cutting of the upper housing 3 (Figs. 1-4).

Regarding claim 39, apparatus claim 39 is rejected for the same reason as apparatus claim 1 since the recited elements would perform the claimed steps.

3. Claims 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishimura (US Pat Pub# 2006/0063570) in view of Hirayama (EP 1 271 897 A2) and further in view of Schmitt et al. (US Pat# 6,088,585).

Regarding claim 8, Nishimura in view of Hirayama teaches the limitations in claim 1. Nishimura and Hirayama fail to teach a fingerprint sensor.

Schmitt's portable telecommunication device including a fingerprint sensor teaches a fingerprint sensor 30 (Fig. 14).

Therefore, it would have been obvious at the time of the invention to one of ordinary skill in the art at the time the invention was made to incorporate a fingerprint sensor as taught by Schmitt into a pointing device, intersecting axes is formed in a column, and a through cutting in an edge portion of the upper housing as taught by Hirayama into Nishimura's portable apparatus in order to increase security and reliability (Col. 3 lines 3-11).

Regarding claim 9, the combination including Schmitt teaches wherein the control unit 207 (Fig. 15) can operate the terminal 190 (Fig. 15) when the fingerprint sensor 30 (Fig. 15) detects a predetermined input.

4. Claims 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishimura (US Pat Pub# 2006/0063570) in view of Hirayama (EP 1 271 897 A2) and further in view of Kim (US Pat# 6,621,066).

Regarding claim 13, Nishimura in view of Hirayama teaches the limitations in claims 1 and 10. Nishimura and Hirayama fail to teach a magnetic sensor.

Kim further teaches wherein the position detection means comprise a magnet 300 and 302 (Fig. 4) and a magnetic sensor 236 and 238 (Fig. 4).

Therefore, it would have been obvious at the time of the invention to one of ordinary skill in the art at the time the invention was made to incorporate a sensor detection means as taught by Kim into a pointing device, intersecting axes is formed in a column, and a through cutting in an edge portion of the upper housing as taught by Hirayama into Nishimura's portable apparatus in order to have a more efficient and precise control for opening or closing the sub-body folder upon using of the terminal (Col. 1 lines 51-61).

Regarding claim 14, Kim further teaches wherein the magnet 300 and 302 (Fig. 4) and the magnetic sensor 236 and 238 (Fig. 4) are arranged in separate housings (Fig. 4).

Regarding claim 15, Kim further teaches wherein the magnetic sensor is a Hall element (Fig. 4).

5. Claims 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishimura (US Pat Pub# 2006/0063570) in view Hirayama (EP 1 271 897 A2) and further in view of Wada et al. (US Pat Pub# 2003/0174240).

Regarding claim 20, Nishimura in view of Hirayama teaches the limitations in claim 1. Nishimura and Hirayama fail to teach a lock unit.

Wada's mobile telephone teaches a lock unit for locking the 2-axis hinge unit (Section 0055).

Therefore, it would have been obvious at the time of the invention to one of ordinary skill in the art at the time the invention was made to incorporate a lock unit as taught by Wada into a pointing device, intersecting axes is formed in a column, and a through cutting in an edge portion of the upper housing as taught by Hirayama into Nishimura's portable apparatus in order to increase security (Section 0017 and 0056).

Regarding claim 21, Wada further teaches wherein the lock unit is controlled by an input from the information input device (Section 0055).

Regarding claim 22, Wada further teaches wherein the information input device is a personal authentication sensor (Section 0055); and the lock unit is released when the sensor detects a predetermined input (Section 0055).

6. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nishimura (US Pat Pub# 2006/0063570) in view of Hirayama (EP 1 271 897 A2) and further in view of Wada et al. (US Pat Pub# 2003/0174240) and further in view of Schmitt et al. (US Pat# 6,088,585).

Regarding claim 23, Nishimura in view of Hirayama and further in view of Wada's mobile telephone teaches the limitations in claims 1 and 20-22. Nishimura, Hirayama, and Wada fail to teach a fingerprint sensor.

Schmitt's portable telecommunication device including a fingerprint sensor teaches a fingerprint sensor 30 (Fig. 14).

Therefore, it would have been obvious at the time of the invention to one of ordinary skill in the art at the time the invention was made to incorporate a lock unit as taught by Wada into a fingerprint sensor as taught by Schmitt into a pointing device, intersecting axes is formed in a column, and a through cutting in an edge portion of the upper housing as taught by Hirayama into Nishimura's portable apparatus in order to increase security and reliability (Col. 3 lines 3-11).

#### ***Response to Arguments***

7. Applicant's arguments with respect to claims 1-3, 5-25, and 37-39 have been considered but are moot in view of the new ground(s) of rejection.

#### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANDREW WENDELL whose telephone number is (571)272-0557. The examiner can normally be reached on 8:00-5:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on 571-272-7882. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Andrew Wendell/  
Examiner, Art Unit 2618

12/30/2009